Second Announcement and Call for Abstracts

International Conference on Nuclear Data for Science and Technology
"ND2004"
September 26- October 1, 2004
Eldorado Hotel
Santa Fe, New Mexico, USA
http://t16web.lanl.gov/nd2004/

Note: Abstracts should be submitted by December 15, 2003. See below for details.

The International Conference on Nuclear Data for Science and Technology will be held September 26-October 1, 2004 in Santa Fe, New Mexico, USA. This is an OECD-Nuclear Energy Agency Conference, which is held approximately every 3 years. Recent conferences in this series were in Antwerp (1982), Santa Fe (1985), Mito (1988), Juelich (1991), Gatlinburg (1994), Trieste (1997) and Tsukuba (2001). This International Conference focuses on nuclear data, their production, dissemination, testing and application. The data are produced both through experiment and theoretical models; they are compiled and evaluated to form data libraries of use in applications; and they are tested through benchmark experiments and a very wide range of applications. This Conference includes all of these activities with the goal of improving nuclear data for applications including fission and fusion energy, accelerator driven systems, accelerator technology, spallation neutron sources, nuclear medicine, environment, space, non-proliferation, nuclear safety, astrophysics and cosmology, and basic research.

Venue: The conference will be held at the Eldorado Hotel in Santa Fe, New Mexico, USA. Santa Fe is a tourist destination as well as a location for many meetings. It is situated at 2,130 meters elevation in the foothills of the Rocky Mountains, and is known for its scenery, multicultural attractions, archaeological sites, art, music, sunshine and outdoor activities. Although no tours are planned at the national laboratories, Santa Fe is near the Los Alamos National Laboratory (35 miles = 56 km), Sandia National Laboratory (70 miles = 113 km), and the VLA Radiotelescope (150 miles = 241 km).

Conference topics include:

1. Nuclear Data Evaluations, Data Testing, and Dissemination
   - Nuclear Reaction Data and Evaluated Data Libraries: Advances in major libraries, neutron and charged-particle reaction data, photonuclear data, covariance data, fission yields, evaluation methods, data at thermal energy.
   - Nuclear Structure and Decay Data: Advances in compiled and evaluated nuclear structure and decay libraries, nuclear masses, nuclear levels and level densities, strength functions.
   - Nuclear Data Evaluations: Problems and progress in critical evaluations.
   - Processing, Testing, and Validation of Evaluated Nuclear Data: Advances in processing methods and codes, application codes, benchmark tests, other integral tests, sensitivity analysis, quality assurance.

- Data Dissemination and International Collaborations: Data centers, dissemination statistics, data charts, collaborations in measurement and evaluation.

2. Measurements and Experimental Facilities
   - Fundamental Physics with Neutrons: Properties of the neutron, symmetries, tests of the standard model, chaos, parity violation
   - Experimental Facilities and Methods: Advances in facilities producing nuclear data, measurement techniques, equipment.
   - Standards and Dosimetry: Standard cross sections, measurements and evaluations, dosimetry cross sections.
   - Measurements of cross sections to elucidate reaction mechanisms, including physics off beta stability, radioactive beams, isomers, nuclear reactions and structure, and spectroscopy.

3. Theory and Calculational Models
   - Nuclear Theory: Advances in nuclear theory relevant to data evaluation, reaction theory, nuclear structure theory, developments in nuclear modeling codes.
   - Nuclear structure and reactions off stability.
   - Advances in Calculational Methods: Impact of high-speed computers, algorithms, Monte Carlo and deterministic methods.

4. Nuclear Data in Astrophysics & Cosmology: Advances in stellar models, nucleosynthesis, cosmology, neutrinos, cosmic rays, measurements, evaluations.

5. Applications
   - Fission Energy: Advances in fission energy programs, measurements, evaluations, new designs, data needs.
   - Fuel cycle and waste disposal.
   - Fusion Energy: Advances in fusion energy development, measurements, evaluations, new designs, data needs.
   - Accelerator Technology and Accelerator Driven Energy Systems: energy amplifiers, waste incineration, advanced reactor concepts
   - Medicine, Environment, Space, and Other Technologies: Advances in applications, data needs.
   - Non-proliferation and Related Topics: Advances in detection and other technologies, data needs, measurements, applications.
   - Nuclear safety: Advances in criticality safety, fission energy, environmental safety, data needs.

Call for Abstracts: One page abstracts are due by December 15, 2003. For instructions and templates, go to the Web site: http://t16web.lanl.gov/nd2004/. The abstracts and manuscripts must be in English. The Local Organizing Committee will review the abstracts and select those to be presented. Please indicate on the Web-submission whether your contribution is intended for oral or poster presentation. Because many contributions are expected, not all will be accepted for presentation, but we hope to

include as many as possible. Notice of acceptance or rejection will be made before March 1, 2004.

Proceedings: The Conference proceedings will be published as a conference proceeding by the American Institute of Physics. This publication will consist of a book as well as continuing availability electronically to subscribing institutions.

Registration: Details on registration will be available on the ND2004 Web site beginning December 1, 2003. Tentative registration fees for conference participation are as follows:

Early registration, on or before July 31, 2004	$400
Registration after July 31 and on or before September15	$450
Registration after September 15, 2004	$500
Student registration on or before July 31, 2004	$150
Student registration after July 31, 2004	$200

Support for a limited number of scientists from developing countries may be available from the Nuclear Data Section of the International Atomic Energy Agency.

Technical Tour: The Conference will not include a technical tour. Those wishing to visit laboratories or universities in the area should make arrangements with their hosts.

Visas: The Committee cannot assist in obtaining visas other than to provide letters of invitation to the Conference. Because the time required to obtain visas is longer now than in past years, participants requiring visas should apply well in advance of the conference.

Transportation: Most visitors to the Santa Fe area arrive at the Albuquerque (large) or Santa Fe (much smaller) airports. Bus service to the Eldorado Hotel is available from the Albuquerque airport and should be reserved in advance. Taxi service is available at the Santa Fe airport. Details will be provided on the Third Announcement.

Accommodations: Details of accommodations will be provided on the Web by December 1, 2003. Blocks of rooms have been reserved at the Conference hotel and at a nearby hotel.

Key dates:

First announcement:	July 25, 2003
Second announcement	October 1, 2003
Registration, accommodation Information available on Web	December 1, 2003
Deadline for abstracts	December 15, 2003
Notification of abstract review results	March 1, 2004
Third announcement	March 1, 2004
Deadline for papers	August 31, 2004
Conference	September 26-October 1, 2004

We look forward to seeing you here in Santa Fe for ND2004!

Robert C. Haight
Mark B. Chadwick
Co-chairs of ND2004